

### **Abstract of the Disclosure**

A beltless fiber optic labor contraction sensing device including a fiber optic strain sensor for detecting labor contractions during childbirth. The fiber optic strain sensor includes an optic cable, a light source for transmitting a light beam through the optic cable and a light detector for identifying changes in the optical signal. The fiber optic strain sensor is operable to generate an appropriate response to any changes in the optical signal that are caused by the application of force against the fiber optic cable. An adhesive pad or sensor jacket is provided to secure the fiber optic strain sensor to the mother's abdomen without the use of a belt or strap. The contraction device includes wireless communication for transmitting an output signal to a standard contraction recording device. Further, one or more of the components of the labor contraction sensing device are fabricated so as to be disposable.